NITE-TIMES NEWS

CHICAGO AREA TIMEX USERS GROUP

NITE-TIMES INFO

The Nite-Times News is the newsletter of the Chicago Area Timex Users Group. For an annual fee of $10.00 you can become a CATUG member with full membership privledges. The Chicago Area Timex Users Group is pleased to exchange newsletters with other Timex and Sinclair supporting users groups. If you desire to reprint any articles that appear here, please provide credit to the author and this newsletter. If you have any suggestions or would like to submit an article, please mail it to:

    The Chicago Area Timex Users Group
    Nite-Times News Editor
    1885A Yorktown Avenue
    Great Lakes, Illinois 60088.

ARTICLES IN THIS ISSUE

DECEMBER C.A.T.U.G. MEETING

The Chicago Area Timex Users Group meets on the third saturday of each month in the Downers Grove Public Library's Conference Room, from 12:00 to 5:00. Due to the busy Holiday season during December, the next meeting has been moved up to the second saturday of the month. This meeting will be on the 10th of December. The library is located at 1050 Curtiss Street in Downers Grove. The CATUG representative for this meeting is Steve Cooper and he can be contacted evenings at (312) 968-3553.

Our December meeting will be an important one. The following items are curently scheduled:

1. Selection of 1889 Coordinators
2. Review of CATUG treasurey
3. Demo's of the four disk systems for the TS-2068

DIRECTIONS FROM THE NORTH: Take I-294 (Tri-State Tollway) south to I-88 (East West Tollway). Drive west on I-88 and exit at Highland Avenue. Take Highland south about three miles, during which it's name will change to Main Street. You will cross the Burlington-Northern tracks in downtown Downers Grove and turn right (west) at the next street (Burlington). Proceed one block to Forest Ave. At the intersection of Forest and Burlington is a public parking lot. The Library is located one block south of Burlington at the intersection of Curtiss and Forest. Please note that Burlington is a one-way street (westbound) and Curtiss is a one-way street (eastbound).

DIRECTIONS FROM THE SOUTH: Take I-55 (Stevenson Expway) to the Lemont Rd North exit. Take Lemont Road north about four miles during which it will merge into Main Street. As you go into downtown Downers Grove, you will pass Curtiss Street, and turn left at the next intersection (Burlington), which is the last street before you cross the railroad tracks. Proceed one block west to Forest Ave. At the intersection of Forest and Burlington is a public parking lot. The Library is located one block south of Burlington at the intersection of Curtiss and Forest. Please note that Burlington is a one-way street (westbound) and Curtiss is a one-way street (eastbound).

NITE-TIMES CLASSIFIEDS

The Nite-Times Classified Ads are a service provided to all of our readers. Please submit your ads prior to the 15th of each month. They may be mailed to the Nite-Times News at 1885A Yorktown Avenue, Great Lakes, Illinois 60088.

* * * * *

********* FULL COLOR SCREEN DUMPS for the TS-2068! *********

Now, with an OKIMATE 20 Printer, one of two possible Plug 'n Print interface configurations, and "COLOR COPY" software, a TS-2068 user can easily have screen copied in FULL COLOR and black and white. The two I/F hardware configurations are:
(1) An IBM paralell Plug 'n Print cartridge and an AERCO or OLIGER parallel printer I/F.
(2) A COMMODORE 64/128 Plug n' Print cartridge and my COMMODORE serial port emulator I/F. (Note: This same I/F will interface a COMMODORE Printer/Plotter to a 2068 - write for more info and a sample plot.)
For more information on the I/F requirements and details on the software available for the OKIMATE 20, send a LSASE to:
   John McMichael
   1710 Palmer Drive
   Laramie, WY 82070

* * * * *
FOR SALE

$65.00 TS2068 Computer with software and books
$20.00 TS2040 Printer
$50.00 TS2050 Modem
For more information, call Gary Lessenberry at (312) 473-9415.

* * * * *
FOR SALE

$50.00   Seikoska 100 Paralell Printer
$35.00   Memotech Remote Keyboard & Interface
$25.00   TS-1000 Computer
$25.00   TS-2068 Computer
$15.00   Centronics Printer Interface
$25.00   Memotech 16K RAM
$10.00   Two DP100 Printer Ribbons
$15.00   12x15x4.5 Blank Keyboard Box
$ 5.00   Per title of many TS-1000 and TS-2068 Programs
For more information, contact:
   Ray Youngberg
   6353 Freeport Drive
   Dayton, Ohio 45415
   (513) 890-4737

* * * * *
FOR SALE

$ 40.00 Tube Tester, Heath W/roll chart
$125.00 CRT Rejuvinator, Color & B/W
$ 85.00 Heath 2 meter Linear 40 watt
$150.00 New 10 Mhz Heath Dual Trace Scope, needs some work
$100.00 Dual A&J Microdrives with IF and 24 to 30 Wafers
$150.00 Heath Auto Ignition Scope with 12V Inverter
$ 75.00 Flyback Tester with HV Probe
$ 50.00 IBM Serial Thermal Printer
$ 65.00 Color Bar Generator, new & needs work
$ 85.00 Electronic Switch, dual trace from single trace scope
$ 75.00 HM2141 POW/SWR Meter
$150.00 HW-8 QRP Transceiver
$ 60.00 Phonemate Answering Machine
$100.00 One Lot two way radio
$225.00 HW6502 2 meter hand held with speaker mike and 25 watt mobile mount.
$????? Best offer for a Motorola TA104 FM Low band (39.5) Mhz. Mobile Two-way Radio with remote control.
All of the above equipment is for sale or trade. I am looking for a disk disk drive system for my TS-2068, preferably a Larken with.25" drives. All sales and trades are final. All prices include shipping to any reasonable location. For more info contact:
Bill's Electronics, R.R. 1, Box 364, Bridgeport, IL 62417
Tel: (618) 945-7314

* * * * *
FOR SALE

*** $200.00 BUYS IT ALL! ***
ZS-I/O RS-232 Interface
TS-2068 - mounted in a fan cooled plexiglass case with a Spectrum ROM Switch, an internal TS-2050 Modem and a full sized keyboard.
Gorilla Banana Printer with a ribbon re-ink kit
Two TS-2050 Modem Cards (one works)
Two Winky Boards (One for the TS2068 and one for the TS1000)
Lots of Books and Magazines
For more information, contact:
   Don Brumfield, 106 Kirkfield Drive, Cary, NC 27511
   (919) 859-4142

* * * * *
FOR SALE

1. QL_FLIGHT ($17), HOPPER ($10), HYPERDRIVE ($10), CAVERNS-2 $(10). All four for $30.00 plus $2. for shipping if not picked up at CATUG meeting.
2. ZENITH DATA SYSTEMS ZT- series remote terminal with built-in 300 baud modem, cables and power supply for 225.00 or best offer. For more information, contact:
   Al Feng,15 Wake Robin Ct, Woodridge, IL 60517

TIMEX TIDBITS

CATS newsletter printed that Syd Day of QUANTA has indicated that ZX8301 chips for the QL are going to be produced. However, this is still only a rumor at this point.

According to the ISTUG newsletter, Curry Computer has stopped importing Spectrum software from England. There are also plans to liquidate their Spectrum software titles at rock-bottom prices. For more info, call 800/628-2828 #950.

The Hacker Newsletter reports that Silicon Moutain Computers has finally ceased operations and soon will be replaced by Silicon Mountain Electronics. Fred Nachbaur has released all of his programs with the exception of SRAM HI-RES EXTENDED BASIC and ZX-TERM#80 to the public domain. Fred has also reported that the IQ 8300 and the Power 3000 computers are identical to the PC 8300.

Knighted Computers has moved. Their new address is 803 South 4th Street, Fulton, NY 13069.

The Pixel Print Press will be available on the O.E.C. BBS beginning November 1st. To access the T/S SIG on the O.E.C. BBS, call 614/423-7879.

The CATUG recieved the following catalogs: Curry Computer, EMSoft, MEI/Micro Center, and Cambridge Direct.

The November issue of CATS indicated that they are in the process of establishing a BBS to support the upcomming Capitol Fest in May.

Standby QL enthusiasts! According to the CATS, the latest issue of QUANTA and the October issue of QL world did favorable reviews of the QL emulator for the Atari ST. That's right, when replacement chips like the ZX8301 are in short supply, somebody is trying to convert an much more expensive machine to a QL. What I'd like to see is an MSDOS emulator for the QL. level of the QL.

There are reports circulating that you can purchase a TS-1500 with a TS-2040 for $30.00 from Electronics Surplus Inc, 1224 Prospect Ave, Cleveland, OH (tel: 216/612-1052).

The LISTing reports that Curry Computer has sold out of their QL's and that Curry is using the shortage of 8301 and 8302 chips as a reason to advise people NOT to upgrade their QLs. I wonder if Curry is sincere in his apparent concern for QL owners...

Also, according to the LISTing, SCLD chips (the heart and soul of the TS-2068) may be currently obtained from two sources: Eric Jonson (tel: 904/775-4935) and Paul Holmgren (tel: 317/291-6002).

LOTTERY RANDOM NUMBER PICKER
By Butch Weinberg

```
100 display
110 DEFine PROCedure display
120 MODE 4
130 OPEN #1, scr_475x75a3x0: OPEN#2,con_475x75a3x75:
    OPEN#3,scr_475x55a3x150
140 PAPER #1,7: INK #1,2: PAPER #2,7: INK #2,0: PAPER #3,4:
    INK #3,2
150 BORDER #1,4,12:BORDER #2,4,18:BORDER #3,2,20: CLS #1:
    CLS #2: CLS #3: CLS #0:
160 CSIZE #1,1,1: PRINT #1\\ TO 12;"LOTTERY RANDOM NUMBER
    PICKER"\ TO 15;"By Butch July 1988": main
170 END DEFine
180 DEFine PROCedure main
190 CSIZE #2,1,1: CLS #2: INPUT #2; TO 4;"How many numbers? "
    \ TO 4;"3=daily, 4=PICK-4, 6=LOTTO, etc  ";no: FOR i=1 TO
    100: NEXT i
200 CLS #2: INPUT #2; TO 4;"What is the top number?"\ TO 4;n
210 CLS#2: INPUT#2; TO 4;"Do you want zero's? "\ TO 4;" Y or N"
    ;o$: IF o$=="y" THEN o=0: ELSE o=1: END IF
220 CLS #2: INPUT #2; TO 4;"Do you want a hard copr? ";H$
230 IF o$=="y" THEN zero$=" With zero's ": ELSE zero$=" without
    zero's ": END IF: IF H$=="y" THEN pri$=" with a printout ":
    ELSE pri$=" with no printout "
240 CLS #2: PRINT #2; TO 4;"You have ";no;" numbers to  ";n\ TO
    4;zero$;" and ";pri$
250 IF no<=4 THEN num ELSE numb END IF: END DEFine
260 DEFine PROCedure num
270 a=RND(o TO n)
280 a=INT(a)
290 b=RND(o TO n)
300 b=INT(b)
310 c=RND(o TO n)
320 c=INT(c)
330 d=RND(o TO n)
340 d=INT(d)
350 e=RND(o TO n)
360 e=INT(e)
370 f=RND(o TO n)
380 f=INT(f)
390 scpr: IF H$=="y" THEN printer: ELSE chose: END IF :END
    DEFine
400 DEFine PROCedure numb
410 a=RND(o TO n):a=INT(a)
420 b=RND(o TO n):b=INT(b)
430 IF b=a THEN GO TO 420: END IF
440 c=RND(o TO n):c=INT(c)
450 IF c=b :: c=a THEN GO TO 440: END IF
460 d=RND(o TO n):d=INT(d)
470 IF d=c :: d=b :: d=a THEN GO TO 460: END IF
480 e=RND(o TO n):e=INT(e)
490 IF e=d :: e=c :: e=b :: e=a THEN GO TO 480: END IF
500 f=RND(o TO n):f=INT(f)
510 IF f=e :: f=d :: f=c :: f=b :: f=a THEN GO TO 500: END IF
520 sort
```

LOTTERY RANDOM NUMBER PICKER

```
530 scpr : IF H$=="y" THEN printer: ELSE chose: END IF : END
    DEFine
540 DEFine PROCedure scpr
550 IF no=3 THEN INK #3,0: CSIZE #3,2,1: PRINT #3;" ";a;",";b;
    ",";c: END IF
560 IF no=4 THEN INK #3,0: CSIZE #3,2,1: PRINT #3;" ";a;",";b;
    ",";c;",";d;: END IF
570 IF no=5 THEN INK #3,0: CSIZE #3,2,1: PRINT #3;" ";q(1);","
    ;q(2);",";q(3);",";q(4);",";q(5): END IF
580 IF no=6 THEN INK #3,0: CSIZE #3,2,1: PRINT #3;" ";q(1);","
    ;q(2);",";q(3);",";q(4);",";q(5);",";q(6): END IF
590 END DEFine
600 DEFine PROCedure printer
610 OPEN #5,ser1
620 PRINT #5;CHR$(27);"W";1"CHR$(27);"E"
630 If no=3 THEN PRINT #5; " ";a;",";b;",";c: END IF
640 If no=4 THEN PRINT #5; " ";a;",";b;",";c;",";d: END IF
650 If no=5 THEN PRINT #5; " ";q(1);",";q(2);",";q(3);",";q(4);
    ",";q(5): END IF
660 If no=6 THEN PRINT #5; " ";q(1);",";q(2);",";q(3);",";q(4);
    ",";q(5);",";q(6): END IF
670 PRINT #5;CHR$(27);"W";0;CHR$(27);"F"
680 chose: END DEFine
690 DEFine PROCedure chose
700 CLS #2: INPUT #2; "Would you like another set?"\"Y or N
    then ENTER "; MORE$
710 IF MORE$=="y" THEN RUN: ELSE PRINT #5;CHR$(12);: STOP:
    END IF
720 END DEFine
730 DEFine PROCedure sort
740 DIM q(no)
750 q(1)=a: q(2)=b: q(3)=c: q(4)=d: q(5)=e: q(6)=f
760 FOR r=1 TO (no)
770 FOR t=1 TO (no)-r
780 IF q(t)>q(t+1): sorted: END IF
790 NEXT t: NEXT r
800 NEXT FOR t: END FOR r: RETurn
810 END DEFine
820 DEFine PROCedure sorted
830 u=q(t): v=q(t+1)
840 q(t+1)=u: q(t)=v
850 END DEFine
```

EPROMS ARE ALIVE AND WELL...
...AND LIVING IN REDWOOD CITY
Reprinted from Timelinez

Well alive yes, but not moving too swiftly. Burning a program into an EPROM, headers needed for auto run, and hardware requirements have all been worked out. Now EPROM applications are needed.

EPROMS can replace the internal ROM(s) to provide corrections, customization and expansion of the computer's operating system. Replacing the internal ROM(s) with EPROMS require some rewiring but all the internal ROMs are in sockets. Unfortunately, the TS-1500 ROM is in a 24 pin socket which does not lend itself to replacement by EPROM.
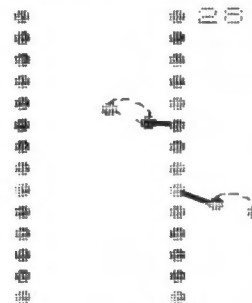
Application programs can be run directly in the EPROM if certain conditions are met. These conditions include: all variables must be in RAM, the code must run at the EPROM addresses, and of course the number of bytes must fit in the EPROM. Copying the program from EPROM to RAM overcomes these restrictions but uses up RAM space.
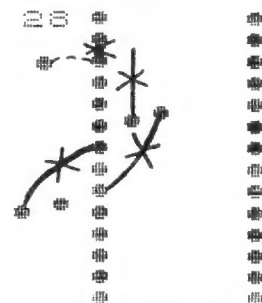
ZX81/TS1000:

Devices such as the ROMPAK adapt the rear expansion bus for an 8K EPROM. The external 8K EPROM cannot be used if an internal 16K EPROM has been installed as it uses the same memory area.

Machine code can be run in EPROM but BASIC programs must be copied into RAM.

The internal 8K ROM is a 28 pin socket so an 8K of 16K EPROM can be installed. FOUR traces must be cut and three jumpers must be installed. (see diagram 1)

COMPOENT SIDE
IC2

SOLDER SIDE
IC2

TS1500:

Timex designed the TS1500 for auto load program cartridges. If the transistor on a ROMPAK is removed, the ROMPAK can work like an auto load cartridge. A 136 byte header on the EPROM is required for autoload. The program must be in BASIC and 8056 bytes or less. The BASIC program is copied into RAM.

TS2068:

There are two internal ROMs in the TS2068, the HOME ROM and the XROM (extension ROM). The HOME ROM is 16K bytes with only 36 bytes unused.

The XROM is 8K in a 28 pin socket. Because it operates in it's own bank, you have a choice of replacing it with an 8K, 16K, or 32K EPROM.

TS2068 cartridge requirements have been well documented. BASIC programs on cartridge run by copying only one line at a time into RAM. This frees up RAM memory for other uses.

EPROMS ARE ALIVE AND WELL...
...AND LIVING IN REDWOOD CITY
continued from page 4

My current projects include modem to modem transfer of code from one computer to another nad writing short machine code functions and utilities.

The modem to modem transfer will permit moving programs from a TS1500 to a TS2068 for making auto load EPROMS for the TS1500. The TS2068 has an assembler and a monitor to add the header.

I have modified a TS2068 for internal EPROMs. Adding short machine code routines extends the keywords without using any RAM memory. These extensions can be used from BASIC, machine code, or in the command mode.

My HOME EPROM has been changed so if the keyword STEP is entered followed by a number (0-255), the program jumps to a routine in an XROM EPROM. I currently have about 50 such routines and am adding more. The routines will ahve to average 40 bytes each to allow all 256 routines to fit in the space available.

If I can help with one of your projects, send a SASE to:
BOB ORRFELT
3436 Bay Road
Redwood City, CA 94063
tel: 415/369-9163

ON QL DISK INTERFACES
By Al Feng

Year end is a good time to tally up your computing costs (as well as, other household expenses!). Are you still running a plain 128K QL and saving a lot of hard copies or FILENAME_docs? Do you have to buy more microcarts every month? Should you add a disk drive system and/or memory?

Extra memory is like having a NLQ printer. If you've gotten by without extra memory till now, you can probably live without it for a little longer.

The matter of (not) employing disk drives is a more day-to-day matter, however. If you still use microcarts, then you should be backing up ALL your programs and files; and, that can result in a lot of microcarts. I'm not going to give you the dollars and cents of kilobytes per medium; but, I will say that I STILL DISCARD at least one microcart every other month due to tape failure!

There are three-and-a-half disk interfaces which you can buy for your QL. The CUMANA I/F ($130), the SANDY Q-BOARD w/0K ($170), the TRUMP CARD w/768K ($300), and its half-brother, the ACE CARD w/256K ($230).

The CUMANA interface (at least the one I have) is about as barren of features as the Chicago City Council is of "virtuous" men. It does get the job done, and unlike the others, it can access up to four drives (if you have them).

The SANDY Q-BOARD with 512K set the stage for the TRUMP CARD. Sharp's doesn't seem to carry this, and only lists the SQB with 0K of RAM. If you don't want memory expansion, but want a Super TOOLKIT II, then this might be a good choice (I haven't seen one of these, but apparently there are NO sockets for memory chips on this board or the necessary logic. DUMB. They could probably still sell a lot of these if they were socketed.).

The reason to get the ACE CARD is if you don't want any memory expansion, but you want to run a program which requires more than the standard QL,s 128K (e.g., TurboQUILL). As with its big brother, it comes with features galore. However, if you're going to tandem it with an existing 512K expansion, do a friend in your User Group a favor and buy a TRUMP CARD and sell your 512K for the price difference (ask Butch or Leo about the virtures of the TRUMP CARD).

All right, you say you're going to rush right out with your hard earned money and buy an interface, a power supply and a (pair of) disk drive(s). Plan on spending between $200 and $700. It's only money; and, it's easier to replace than either data or programs.

Which is better/best? I purchased my disk interface and extra memory a month before the TRUMP CARD was announced, and I used to regret my timing. I have to tell you that I was VERY SURPRISED to learn that neither the TRUMP/ACE CARDs nor the SANDY Q-BOARD access more than two drives. I do mind having a lot of "stuff" hanging off my QL; but, I'd rather live with the "SINCLAIR LOOK" than be limited to only a pair of disk drives. Of course, you'll have to assess your own needs.

CATUG LIBRARY NOTES
By Gary Lessenberry

The Chicago Area Timex Users Group Library has received the following listed articles from other user groups via our newsletter exchange. The newsletters with these articles will be available for check out at the monthly CATUG meetings.

CATS Newsletter (Sept 1988)
    QL On The QT
    Desktop Publishing
    WRx16 Revisited!
    Software Review Of Money Machine II
CATS Newsletter (Oct 1988)
    Telecommuting With Timex Sinclair Computers
    What A Weird Program (2068 Prog)
CATS Newsletter (Nov 1988)
    QL'n Packet
    QL Utilities (QL Prog)
    QL On The QT
SLUG Newsletter (Sept 1988)

CATUG LIBRARY NOTES
continued from page 5

SLUG Newsletter (Oct 1988)
SLUG Newsletter (Nov 1988)
I.S.T.U.G. Newsletter (Aug 1988)
I.S.T.U.G. Newsletter (Sept/Oct 1988)
HATS Newsletter (Oct 1988)
   Unavez Music Program (2068 Prog)
HATS Newsletter (Nov 1988)
   A 2068 Music Program
The Hacker (Sept 1988)
The Hacker (Oct 1988)
The Hacker (Nov 1988)
KATS Komputer Knews (Sept 1988)
KATS Komputer Knews (Aug 1988)
   Stonker, A Spectrum Program Review
   KATS Icons
SMUG Bytes (Sept 1988)
   Rudy's "SQ" Notes
   Bill On Mscript
   Review Of The Cleveland Computerfest
SMUG Bytes (Ocy 1988)
   Rudy's "SQ" Notes
   Bill On Mscript
   Pumpkin (2068 Prog)
Pixel Print Press (Fall 1988)
The Data Expansion (Sept 1988)
   Types Of Assemblers For Z80 Programming
   Thinchars (Spectrum Prog)
   Multi-File (Spectrum Prog)
QZX Journal (Sept 1988)
   Satelite Information
   USR Key (TS-1000 Project)
FDD Express (Sept 1988)
   CP/M Tutor
FDD Express (Oct 1988)
   Timex CP/M To CP
FDD Express (Nov 1988)
   Power And Ports
The Data Bus (Oct 1988)
   Timex Sinclair News
BoSTUG Sinclair/Timex Newsletter (Sept/Oct 1988)
   TS-2068 Machine Code (Book Review)
   Magazine Reviews
   Larken RAMDisk For The TS-2068 (Hardware Review)
   Columnifying Quill
TS Bulletin (#6 1988)
   Utility For Pop-Up Functions (TS-1000)
   Preventing Computer Breakdowns
   Speeding Up Basic Programs
   Programming In ZX-81/TS-1000 BASIC
PACC Talk (Sept 1988)

PACC Talk (Oct 1988)
PACC Talk (Nov 1988)
ZX Appeal (Summer 1988)
   ZX81 Video Inverter Project
   32K N.V.M. System Revisited
   QL RAM Extension
   Logical Operators
   Larken Electronics LKDOS
   Cassette Connection
   Using The PC8300 With 64K RAM Packs
   The Trump Card
   TS-1000 Verify (Program)
ZX Appeal (Sept 1988)
   A Great Northwest Sinclair Fest Trip Report
   2068 Cassette Connection
   ZX-TERM*80 And Memotext
ZX Appeal (Oct 1988)
   Weather Forcaster (TS-2068 Prog)
   Patch For *C, *D and *E Bugs In Timachine
Sinc-Linc (Sept-Oct 1988)
   Larken EPROM DOS Version 3
   Big Copy (2068 Prog)
   An Improved Label Maker For The Larken System
   Pascal Disk Handler For The Larken DOS
   Larken DOS File Recovery Program
SINCUS News (Sept-Oct 1988)
   ZX81 Tips
   Modem Tips
LISTing Newsletter (Oct 1988)
   Custom Colors For The 2068 (Prog)
   Resistor Guide (2068 Prog)
   ZX81 Parallel Printer Interface (Project)
TIMELINEZ (Sept/Oct 1988)
   LOTTO Simulator (2068 Prog)
   Sanyo's Slots (QL Prog)
Update! Computer Systems (Oct 1988)
   Too many 2068 & QL articles and programs to list

A NEW CATUG TELECOMM HOME-PORT

Another home-port has become available to CATUG telecommuters. This one is aboard the Motorola Computer Club BBS (MCCBBS) at (312) 576-7072. Bob Swoger, a Timexer from suburban Streamwood is the Sysop of this multi-user BBS. It has three incomming lines and operates 24 hours each day. The system has a call back feature that will help some of us save a few dimes. The system also offers email, bulletins and files transfers.

When you call the MCCBBS, you will need to strike your enter key several times after which a carrot ">" will appear on your screen. You then enter LOG SINCLAIR/GUEST. That will get you online and in the system. Watch for more details about the MCCBBS in upcomming issues of the Nite-Times News.

CHICAGO AREA TIMEX USERS GROUP
(November 1988)

BLAYNE ARNESON:
9211 S. HARDING AVE, EVERGREEN, IL 60642   (312) 422-0030
PAUL BEATTY:
7634 N. GREENVIEW, CHICAGO, IL 60626   (312) 764-8378
JAMES BREZINA:
1029 SPRING RD, ELMHURST, IL 60126   (312) 832-1782
JERRY COHLER:
5928 N. ROCKWELL, CHICAGO, IL 60659   (312) 878-4606
STEVE COOPER:
1300 MAPLE, DOWNERS GROVE, IL 60515   (312) 968-3553
JOHN L. DONALDSON:
835 FOXWOOD CIRCLE, GENEVA, IL 60124   (312) 232-6147
BILL DONETS:
2905 COVERT RD., GLENVIEW, IL 60025   (312) 657-8168
MARK DORINSON:
P.O.BOX 351, FRANKFORT, IL 60423   (815) 469-3403
KEN DUDA:
3345 N. OKETO AVE, CHICAGO, IL 60634   UNLISTED
ALPHONSO FENG:
15 WAKE ROBIN CT, WOODRIDGE, IL 60517   (312) 971-0495
GLORIA GEDONIUS:
459 W. MELROSE, APT 1 E, CHICAGO, IL 60657   (312) 871-6579
JIM HENDERSON:
5710 N. MERRIMAC, PEORIA, IL 61614   (309) 691-3332
JAMES KERR:
626 E. 144TH PLACE, DOLTON, IL 60419   (312) 841-5034
WILLIAM J. KLEIN:
400 E. GARFIELD, INGLESIDE, IL 60041   (312) 587-5665
DAVE LEBOWITZ:
934 GARDNER ROAD, FLOSSMOOR, IL 60422   (312) 798-4365
GARY L. LESSENBERRY:
1885A YORKTOWN AVE., GREAT LAKES, IL 60088   (312) 473-9415
LEOPOLD MAJEWSKI:
14120 WINDSOR CT., WOODSTOCK, IL 60098   UNLISTED
JAMES McCALL:
523 W. BROMPTON AVE. #114, CHICAGO IL 60657   (312) 472-6036
FRANK W. MILLS:
417 S. 47TH AVE, BELLWOOD, IL 60104   (312) 544-1918
NAZIR PASHTOON:
940 BEAU DRIVE #204, DES PLAINES, IL 60016   (312) 439-1679
LAWRENCE P. SAUTER:
7747 W. BRYN MAWR, CHICAGO, IL 60631   (312) 763-5383
EDWIN SCHOEN:
P.O.BOX 9076, DOWNERS GROVE, IL 60515   (312) 852-9372
AL SHERMAN:
9216 MARIE, SCHILLER PARK, IL 60176   (312) 671-2720
BOB SWOGER:
613 PARKSIDE CIRCLE, STREAMWOOD, IL 60107   (312) 837-7957
LEE THORESEN:
45 HICKORY LANE, CRETE, IL 60417   (312) 672-9066

JONH ULREICH:
203 NAUVOO, PARK FORREST, IL 60466   (312) 748-6004
BUTCH WEINBERG:
5028 1/2 S. ELLIS, CHICAGO, IL 60615   UNLISTED
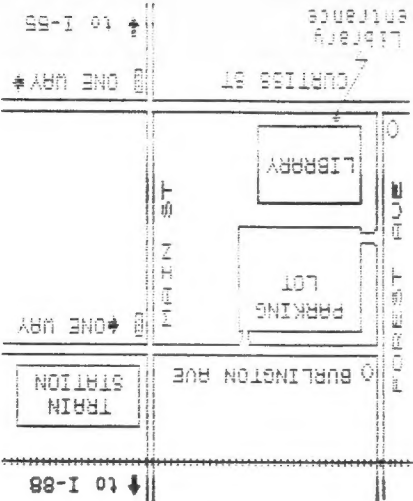

TIMEX/SINCLAIR BBS DIRECTORY
(November 1988)

BULLETIN BOARD	NUMBER	NOTES	RATES
WYSIWYG BBS	(201) 956-7703	8 L D @ S	15/14
TIME<X>CHANGE BBS	(213) 329-3922	8 M D @ S	17/15
GREY MATTER BBS	(213) 971-6260	8 M D @ S	17/15
STARTEXT.	(214) 877-1041	8 M $ S	16/15
RON'S ROS	(817) 540-4183	8 D @ S	16/15
TIMELINES BBS	(216) 671-6922	8 H D % S	15/14
CLEVELAND FREE-NET BBS.	(216) 368-3888	7 L @ S	15/14
KINGS MARKET BBS.	(303) 665-6091	8 M D @ S	16/15
ASTRAL PLANE BBS.	(312) 476-7785	8 L D @ W	-----
MOTOROLA COMPUTER CLUB BBS.	(312) 576-7072	8 L D @ W	-----
PEOPLE-LINK	(800) 826-8855	8 L D $	-----
COMPUSERVE.	(312) 443-1250	7 H D $ S	-----
SERIAL PORT BBS	(313) 286-0145	8 H D S	15/13
ACCESS*LINE*BBS	(317) 841-7072	8 M D S	14/12
LOGON BBS	(415) 571-6911	8 M D @ S	16/14
LOGON BBS	(408) 475-0880	8 M D @ S	16/14
R.M.G. BBS.	(503) 656-8072	8 H @ % S	17/15
IOWA SINCLAIR BBS	(515) 282-4169	8 M D S	15/13
CITYLINK TOWER.	(604) 222-2000	8 H ?	16/14
NICHOLSON NIGHTIME NETWORK.	(604) 354-4666	8 H D S	32/27
OWEGO FREE ACADEMY BBS.	(607) 754-3420	8 L D S	16/15
TCCS BBS.	(607) 785-2118	8 L D S	16/15
O.E.C.	(614) 423-7879	8 D	16/15
THE TIMEWARP BBS.	(617) 481-0555	7 L D @ S	16/15
FLEXI BBS	(617) 648-7651	8 L @ S	16/15
FLASH! BBS.	(702) 644-6910	8 M D S	16/14
NIGHT BYTE BBS.	(718) 627-1293	8 L D % S	15/14
THE BUS DEPOT BBS	(904) 262-6761	8 L D S	16/15

****

TIMEX BBS DIRECTORY LEGEND

7	PARAMETERS = 7/E/1	8	PARAMETERS = 8/N/1
D	TIMEX FILE TRANSFERS	L	LOW USAGE T/S MSG BASE
M	MEDIUM USAGE T/S MSG BASE	H	HIGH USAGE T/S MSG BASE
$	SUBSCRIPTION REQUIRED	%	OPERATION DURING EVENINGS
@	ACCESSIBLE VIA PC PURSUIT	?	DOWN UNTIL FURTHER NOTICE
S	SUMMER VERIFICATION	F	FALL VERIFICATION
W	WINTER VERIFICATION	P	SPRING VERIFICATION

RATES ARE THE CHARGES FROM CHICAGO FOR THE FIRST MINUTE & EACH
FOLLOWING MINUTE AFTER 11:00 PM AND ON WEEKENDS.
****

to I-55

ONE WAY →

CURTISS ST

Library entrance

LIBRARY

HIGH ST

PARKING LOT

FOREST AVE

← ONE WAY

BURLINGTON AVE

TRAIN STATION

to I-88

THE CHICAGO AREA TIMEX
USERS GROUP MEETS AT 18:00
ON THE THIRD SATURDAY OF
EVERY MONTH IN THE
CONFERENCE ROOM OF THE
DOWNERS GROVE PUBLIC
LIBRARY LOCATED AT 1050
CURTISS STREET IN DOWNERS
GROVE

CHICAGO AREA TIMEX USERS GROUP
1385A YORKTOWN AVENUE
GREAT LAKES, ILLINOIS 60088